

**CLAIMS:**

1        1. A coated glass article having an exterior face exposed to periodic contact with  
2 water and an inner face, the exterior face bearing an external water-sheeting coating thereon, the  
3 coating being formed of a carbon layer sputtered directly onto the exterior face at a thickness of  
4 50-100 angstroms, the coating reducing the contact angle of water on the coated exterior face of  
5 the glass to below about 25 degrees and causing water applied to the coated exterior of the glass  
6 to sheet.

7        2. The coated glass articles of claim 1 wherein the thickness of the carbon layer is  
8 15-40 angstroms.

9        3. The coated glass article of claim 1 wherein the water-sheeting coating comprises a  
10 non-hydrogenated carbon.

11        4. The coated glass article of claim 1 further comprising a reflective coating carried  
12 on the inner face of the glass, the reflective coating comprising a metal layer carried between said  
13 inner face and a dielectric layer.

14        5. The coated glass article of claim 4 wherein the reflective coating is an infrared  
15 reflective coating including an inner dielectric layer between the metal layer and the inner face.

16        6. The coated glass article of claim 1 wherein the carbon layer is a graphite carbon  
17 layer.

18        7. A coated substrate having an exterior face exposed to periodic contact with water  
19 and an inner face, the exterior face bearing an external water-sheeting coating thereon, the  
20 coating being formed of a transparent base layer applied directly onto the exterior face and a

21 carbon layer consisting essentially of graphite sputtered onto the transparent base at a thickness  
22 of 50-100 angstroms, the coating reducing the contact angle of water on the coated exterior face  
23 of the substrate to below about 25 degrees and causing water applied to the coated exterior of the  
24 substrate to sheet.

25 8. The coated glass articles of claim 7 wherein the thickness of the carbon layer is  
26 15-40 angstroms.

27 9. The coated glass article of claim 7 wherein the water-sheeting coating comprises a  
28 non-hydrogenated carbon.

29 10. The coated glass article of claim 7 further comprising a reflective coating carried  
30 on the inner face of the glass, the reflective coating comprising a metal layer carried between said  
31 inner face and a dielectric layer.

32 11. The coated glass article of claim 10 wherein the reflective coating is an infrared  
33 reflective coating including an inner dielectric layer between the metal layer and the inner face.

34 12. The coated glass article of claim 7 wherein the carbon layer is a graphite carbon  
35 layer.

36 13. The coated glass article of claim 7 wherein the transparent base layer has a  
37 refractive index that is substantially the same as the substrate.

38 14. The coated glass article of claim 13 wherein the transparent base layer has a  
39 refractive index that is less than about 1.7.

40 15. The coated glass article of claim 14 wherein the transparent base layer has a  
41 refractive index that is approximately between 1.35 and 1.65.

42           16.     The coated glass article of claim 15 wherein the transparent base layer has a  
43           refractive index that is approximately between 1.4 and 1.55.

44           17.     The coated glass article of claim 7 wherein the transparent base layer is a layer of  
45           silicon dioxide.

46           18.     The coated glass articles of claim 7 wherein the thickness of the transparent base  
47           layer is less than about 100 angstroms.

48           19.     The coated glass articles of claim 18 wherein the thickness of the transparent base  
49           layer is about 25-100 angstroms.

50           20.     The coated glass articles of claim 14 wherein the thickness of the transparent base  
51           layer is about 50-70 angstroms.

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